



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS - 1965 - A

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#### DEPARTMENT OF THE ARMY

#### PROCUREMENT OF AMMUNITION, ARMY

#### JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1984, 1985

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4-i January 1983

PROCUREMENT OF AMMUNITION, ARMY

Section 1

Budget Appendix Extract

Language

Program and Financing Schedule
Object Classification Schedule

4-1 January 1983

#### Procurement of Ammunition, Army

#### APPROPRIATION LANGUAGE

For construction, procurement, production, wested, and modification of ammunition, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including ammunition facilities authorized in military construction authorization Acts or authorized by section 2673, title 10, United States Code, and the land necessary therefor, without regard to section 4774, title 10, United States Code, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title as required by section 355, Revised Statites, as amended; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes; (\$2,122,394,000) \$2,334,189,000 to remain available for obligation until September 30, (2) (1985) 1986.

(10 U.S.C. 2353, 2361, 3012, 4531, 4532; Department of Defense Appropriation Act, 1983; additional authorizing legislation to be proposed.)

#### EXPLANATION OF LANGUAGE CHANGES

- (1) To include the procurement of ammunition in support of the equipment upgrade program.
- (2) To change the amount of the appropriation requested for FY 1984.
- (3) To change the obligation expiration date for the FY 1984 program.

4-2 January 1983

Army	Procu	rement of Ame	munition, Arm	,			31 JeN 83
	Program and	Financing (in	n Shousends e	f dollars)		Summery	
Identif	icetion code 21-2034-0-1-051		nt plan (amou nt actions pr		<b>Gbligetions</b>		
		1962 actual	1969 eet.	1984 est.		1 <b>98</b> 3 est.	1984 est.
Pro	parem by activities:						
	Direct:						
	1. Ammunition 2. Ammunition production base support	2,020, <b>695</b> 301,7 <b>20</b>	1,717,500 404,484	2,056,850 277,398	2,068,927 911,840	1,696,306 366,972	2,024,274 303,052
	Total direct	2,322,615	2,121,994	2,394,100	2,980,767	2,065,276	2.327.326
	Reimburseble program	49, 996	119,500	171,100	155,616	177,222	152,398
10.0001	Total	2,406,611	2,241,464	2,505,200	2,536,563	2, 242, 500	2,479,724
	Financina:						
•	Offsetting collections from:						
11,0001	Federal funds	-40, 234	-114,700	-159,400	-35,735	-114,700	-159,400
12.0001	Truet funds	-45,773	-10,400	-11,700	-24, 581	-10,400	-11,700
14.0001	Non-federal sources	-2, 104			-2,077 -62,934		
17.0001	Recoverise of prior year obligations(-) imphigated belonce eveliable, stort of year:	• • • • • • • • • •			-06,004	********	
21.4001	For sompletion of prior year budget slans				-381,531	-265,418	-265,412
21.4002	Available to finance new budget plans		-10,000			-10,000	
21.4003	Reprograming from or to prior year budget plan	-38,361	*******	********	********		• • • • • • • • • • • • • • • • • • • •
23.4001	Unobligated belance transferred to other		10,000			10,000	
	eccounts Unobligated balance available, and of year:	• • • • • • • • • •	10,000		• • • • • • • • • •	10,000	• • • • • • • • • •
24.4001	For completion of prior year budget plans				266,410	205,412	290, 977
24.4002	Available to finance subsequent year budget			**********			•
	ptens	10,000			10,000		
25.0001	Unobligated balance lapsing	36, 361	********		36,361		
36.0001	Sudget authority	2,304,500	2,116,394	2,394,100	2,832,500	2,116,394	2,334,100
	Section and section 12.						
1	Budget authority:						
40.0001	Appropriation	2,361,900	2, 122, 804	2,894,198	2,981,900	2, 122, 394	2,334,189
40.0002	Reduction pursuant to P.L. 97-377	-40 400	-7,000		-49.400	-7,000	
41.0001	Transferred to other accounts(-) Transferred from other accounts	-49,400	1,000		-49,400	1,000	
72.0001	Little ALAN AND AND AND AND AND AND AND AND AND A						
43.0001	Appropriation (adjusted)	2,892,500	2,116,364	2,334,188	2,332,600	2,116,304	2,334,109
	Motation of obligations to outlays:						
71.0001					8,474,187	2,117,400	2,308,624
72.4001	Childered belence, start of year				1,616,400	2,404,416	2,587,516
74.4001					-2,404,416 29,490	-2,567,516	-2,779,040
78.0001	Adjustments in expired eccounts Adjustments in unexpired eccounts				-62, 904		
- a . uuu 1	uniantentia in mutchilat abcomisa						
						1 004 000	

4-3 January 1983

Army	Procurement of Ammunition, Army			31 JaN 83
	Object Classification (in thousands of dollars)		Summery	
identification code 21-2034-0-1-061		1982 actual	1983 est.	1 <b>984 es</b> t.
Direct obligations: Sther services: 128.004 Sther 128.001 Supplies and materials 189.001 Total direct obligations		491,070 1,889,897 2,380,767	489,830 1,575,448 2,065,278	524, 342 1, 802, 984 2, 327, 326
Reimbursable abligations: Other services: Other 225.004 Supplies and materials 299.001 Total reimbursable obligat	lens	28, 396 127, 420 155, 816	19,957 157,265 177,222	33, 137 119, 261 152, 396
999 901 Total childreticas		2.536.583	2.242.500	9 476 724

4-4 January 1983

Army	Procu	rement of Ame	Mnision, Arm	,			31 Jan 83	
	Program and	Finencing (ir	thousands of	f dellers)	1980 Flacet year program			
Identificatio	n pede 21-2094-0-1-051	Budget plan (emounts for procurement actions programed)			Coligations			
		1982 ectuel	1983 eat.	1984 est.	1982 actual	1983 est.	1984 est.	
	by estivities:							
Direct 1. 2.	: Ammunition Ammunition production bese support				38,666 8,987			
	otal direct Reimburseble program				47,653 18,944			
10.0001	Total				67,597			
Financ	ing: etting cellections from:							
3,0001	Adjustment to prior year federal fund orde Adjustment to prior year trust fund orders			********	5,532 2,227			
7.0001 Re	Adjustment to non-federal sources coveries of prior year obligations(-)				-23 -24,731			
1.4001 Fo	ligated belance available, start of year: r gompletion of prior year budget plans ograming from or to prior year budget plan	-36,361			-86, 963			
	ligated balance lapsing	36,361			36, 361			
10 0001	Budget authority							

4-5 January 1983

Army	Prod	urement of Am	munition, Arm	,			31 Jan 83
	Program and	Financing (ir	thousends of	dollers)		1981 Fiscal ;	/eer progrem
identifi	cetion code 21-2034-0-1-051	Budget plan (emounts for procurement actions programed)			Obligations		
		1982 actual	1983 est.	1984 est.	1982 actual	1983 est.	1984 est.
	gram by activities:						
_	1. Ammunition 2. Ammunition production base support				107,747 10,804	56,379 7,682	
	Total direct Reimbursable program				118,551 78,069	64,061 66,112	
10.0001	Total				196,620	132,173	
F 11.0001 13.0001 14.0001 17.0001	inencing: Offsetting collections from: Adjustment to prior year federal fund order Adjustment to prior year trust fund order: Adjustment to non-federal sources Recoveries of prior year obligations(-)				4,964 8,965 50 -38,203		
21.4001 24.4001	Unabligated belance evallable, start of year Unabligated belance evallable, and of year				-304,566 132,179	-132,173	
40 0001	Rudows authority						

4-6 January 1983

Army Proce	arement of Amm	unition, Arma	,			31 JaN 83	
Program end	Financing (in	thousands of	f dollers)		1982 Fiscal y	mer program	
identification code 21-2034-0-1-061		t plan (amount actions pro		Obligations			
	1982 actual	1983 est.	1984 est.	1982 actual	1963 est.	1984 est.	
Program by activities:							
1. Ammunition 2. Ammunition production base support	2,020,895 301,720			1,922,514 292,049	36 365 8	61,576 8,103	
Total direct Reimburaable program	2,322,615 83,996			2,214,563 57,803	£. 3	69,679 8,513	
10.0001 Tetal	2,406,611			2,272,366		75, 192	
Financing: Offsetting cellections from: 11.0001 Federal funds 13.0001 Trust funds	-46, 234 -35, 773		*********	-46, 234 -35, 773		********	
14.0001 Non-federal sources Unabligated balance evallable, start of year: 21.4001 For completion of prior year budget plans 21.4002 Available to finance new budget plans	-2,104	-10,000		-2,104	-13. -10,000	-75,192	
23.4001 Unobligated belance transferred to other accounts Unobligated belance evailable, and of year:		10,000		•••••	10,000		
24.4001 For completion of prior year budget plans 24.4002 Available to finance subsequent year budget plans	10,000			134,245	76,192		
38.0001 Budget authority	2,332,500			2,332,500			
Budges euthor(sy: 40.0001 Apprepriation 41.0001 Transferred to other eccounts(-)	2,361,900 -49,400			2,381,900 -49,400			
49.0001 Appropriation (adjusted)	2.882.500			2, 332, 500			

4-7 January 1983

Army F	Procurement of Amm	unition, Arm	,			31 JeN 83
Program	end Financing (in	thousends of	dollars)		1963 Fiscal )	est program
Identification code 21-2034-0-1-051		t plan (amour nt actions pro			Obligations	
	1982 ectuel	1983 est.	1984 est.	1962 actual	1963 est.	1984 est.
Program by activities:						
1. Ammunition 2. Ammunition production base support		1,717,600 404,494			1,603,122 369,722	69,004 22,674
Total direct Reimbursable program		2,121,994 119,500			1,962,844 88,430	91,678 27,115
10.0001 Tetal		2,241,494			2,051,274	118,793
financing: Offsetting collections from:						
11.0001 Federal funds 13.0001 Trust funds	********	-114,700 -10,400			-114,700 -10,400	**********
21.4001 Unobligated belance available, start of year 24.4001 Unobligated belance available, and of year					190,220	-190,220 71,427
39.0001 Budget authority		2,116,394			2,115,394	
Budget muthority:						
40.0001 Appropriation 40.0002 Reduction pursuent to P.L. 97-377		2,122,394 -7,000			2,122,394 -7,000	
42.0001 Transferred from other accounts		1,000			1,000	
43.0001 Appropriation (adjusted)		2,116,394			2,116,394	

4-8 January 1983

Army	ı	Procurement of Amn	wnition, Arm	<b>y</b>			31 JeN 83	
	Program	and Financing (in	shousends e	f dellers)		1984 Fiscut 3	/ear program	
identification code 21-2034-0-1-051		Budget plan (amounts for procurement actions programed)				Obligations		
		1982 actuel	1983 est.	1984 001.	1982 actual	1983 00%.	1984 mat.	
Pro	gram by activities:			•				
	lrect:							
	1. Amountaion			2,056,850			1,893,694	
	2. Ammunition production bese support			277,339			272, 276	
						*******		
	Total direct			2,334,189			2,165,969	
	Reimbureable program			171,100			119,770	
10.0001	Total	********	• • • • • • • • • •	2,505,289		• • • • • • • • • •	2,285,739	
,	Inencina:							
	Offsetting cellections from:							
11.0001	Federal funds			-169,400			-159,400	
13.0001	Trust funds	.,,		-11,700			-11,700	
24.4001	Unobligated belance available, and of yea	r					219,550	
	-							
40.0001	Budget authority			2,334,189			2,334,188	

4-9 January 1983

#### PROCUREMENT OF AMMUNITION, ARMY

Section 2

Budget Activity Justification

Activity 1 - Ammunition

Activity 2 - Assumition Production Base Support

4-10 January 1983

Department of the Army Annual Budget Estimate	Appropriation PROCUREMENT OF A	ACRET TION APAY	FY 1984
Justification	PROCURBABIL OF A	monition, and	Budget
Budget Program		(Thousands of D	ollars)
	Actual	Estimate	Retimate
Activity 1 - Ammunition	FY 1982	FY 1983	PY 1984
Direct Budget Plan	\$2,020,895	\$1,717,500	\$2,056,850

#### PURPOSE AND SCOPE

AMBUNITION. The FY 1984 request provides for worldwide training consumption, improvements in near term readiness and combat sustainability, and the acquisition of war reserve stocks for use during wartime. Family of munitions included in the request are artillery, mortar, tank, small arms ammunition, rockets, fuzes, demolitions, grenades, pyrotechnic signals, and other ammunition items. The major portion of the funds being requested are identified to newly developed tank rounds, artillery munitions, and small arms ammunition.

#### JUSTIFICATION OF FUNDS REQUESTED

The fiscal year 1984 program provides for worldwide training consumption and losses to inventory through the FY 1984 funded delivery period; increases US Army readiness in support of the FY 1987 suthorized acquisition objective and maintains an active ammunition production base in FY 1984 for modernization and training type munitions. The FY 1984 program includes over 50 different types of ammunition including \$225.7 million for tank ammunition, \$95.8 million for fuses, \$830.2 million for artillerry ammunition, \$117.9 million for propelling charges, \$407.6 million for small arms, \$124.9 million for mortar ammunition, \$112.0 million for nuclear material and \$142.8 million for other ammunition, spares and components for tests, renovation and prove-out. A category breakout of the FY 1984 program is as follows:

4-11 January 1983

### ITEM BREAKOUT, FY 1984

### Tank Ammunition (\$225.7 million)

TYPE	\$ (Millions)	REMARKS
105mm Tank Ammunition	\$157.9	The budget request includes the Armor-Piercing Fin-Stabilized Discarding Sabot-Tracer (APFSDS-T) round to support war reserve objectives, and the Discarding Sabot-Target Practice (DS-TP) and Target Practice-Tracer (TP-T) rounds for training requirements. The FY 1984 request is for 168,000 105mm TP-T cartridges in the amount of \$34.1 million, 173,000 105mm DS-TP in the amount of \$38.5 million and 96,000 105mm APFSDS-T in the amount of \$85.3 million.
120mm Tank Ammunition	64.8	The APFSDS-T, TP-T, and TPDS-T begin production in FY 1984. The APFSDS-T buy is to support war reserve objectives. The TP-T and TPDS-T are for training requirements. The FY 1984 request is for 9,000 120mm APFSDS-T in the amount of \$23.0 million, 13,000 120mm TP-T in the amount of \$17.2 million and 13,000 120mm TPDS-T in the amount of \$24.6 million.
165mm Target Practice (TP)	3.0	This item is required to support training with the Combat Engineer Vehicle. The FY 1984 request is for 10,000 165mm TP rounds in the amount of \$3.0 million.
Fuzes (\$95.8 million)		
Fuze, Proximity	38.4	All fuzes are required for both war reserve and training. Fuzes are procured to balance with artillery and mortar
Fuze, Point Detonating	5.1	projectiles. The FY 1984 request is for 513,000 proximity, 240,000 point detonating and 658,000 mechanical time fuzes.
Fuze, Mechanical time	52.3	
		4-12 January 1983

TYPE	\$ (Millions)	REMARKS
Artillery Assunition (\$83	0.2 million)	
155mm HE, ICM (DP)	233.0	This High Explosive (HE), Improved Conventional Munitions (ICM) projectile is a dual purpose (DP) anti-armor/anti-personnel round. Funding is required to meet war reserve sustainability objectives. The FY 1984 request is for 459,000 projectiles.
155mm, HE, RAP	45.0	This projectile is a High Explosive, Rocket Assisted Projectile (RAP), providing increased range for the 155mm Howitzer. The budget request is needed to meet war reserve requirements. The FY 1984 budget request is for 76,000 projectiles.
155 ADAM/RAAMS	189.7	The Area Denial Artillery Munition (ADAM) and Remote Anti-Armor Mine Systems (RAAMS) projectiles are artillery delivered anti-personnel and anti-armor mines. The projectiles eject sub-munition mines at a designated time. Funding is required to support war reserve objectives. The FT 1984 request is for 4,000 155mm HE ADAM M692 projectiles in the amount of \$18.1 million, 10,000 155 HE, ADAM M73 projectiles in the amount of \$48.3 million, 19,000 155mm HE, RAAMS M718 projectiles in the amount of \$38.4 million and 32,000 155mm HE, RAAMS M714 projectiles in the amount of \$84.9 million.
155mm Copperhead	75.0	The FY 1984 budget request includes a Copperhead procurement in support of war reserve requirements and is for 1,415 155mm Copperhead projectiles.

4-13 January 1983

TYPE	\$ (Millions)	REMARKS
155mm Chemical Munitions	18.1	The budget request includes funding for chemical munitions.
155mm Smoke	22.4	This round provides a smoke screening capability with the 155 Howitzer. The procurement is required to support war reserve objectives and training. The FY 1984 request is for 33,000 155mm smoke screening projectiles.
8-Inch, HE, ICM (DP)	\$201.0	This High Explosive (HE), Improved Conventional Munitions (ICM) round is a dual purpose (DP) anti-armor/anti-personmel projectile. This item is required to support war reserve sustainability objectives. The FY 1984 request for 192,000 8-inch, HE, ICM(DP) projectiles.
8-Inch, HE, RAP	39.4	This item is a High Explosive, Rocket Assisted Projectile providing greater range for the 8-inch Howitzer. The budget request is to support war reserve requirements. The FY 1984 request is for 23,000 8-inch, HE, RAP projectiles.
75mm and 105mm Blank	5.6	These blank rounds are required to support saluting requirements for ceremonial purposes. The FY 1984 request is for 124,000 75mm blank cartridges in the amount of \$3.8 million and 57,000 105mm blank cartridges in the amount of \$1.8 million.
Primer, Percussion	1.0	Primers are required as a component of complete artillery rounds. Primers are procured in balance with the number of projectiles procured. The FY 1984 request is for 259,000 percussion primers.

4-14 January 1983

TYPE	\$ (Millions)	REMARKS
Propelling Charges (\$117.9 Mil	lion)	
155mm Propelling Charges	83.4	155mm propelling charges are procured in balance with the number of 155mm projectiles procured in support of war reserve and training requirements. The FY 1984 request is for 703,000 155mm propelling charges.
8-Inch Propelling Charges	34.5	8-inch propelling charges are procured in balance with the number of 8-inch projectiles procured. The FY 1984 request is for 131,000 8-inch propelling charges
Small Arms Assumition (\$407.6	Million)	
5.56mm, All Types	74.7	The budget request includes funding for 5.56mm Ball, Tracer, and Blank emmunition for the M-16 rifle and Squad Automatic Weapon in support of both war reserve and training requirements. The FY 1984 request is for 434,321,000 rounds of various types of 5.56mm cartridges.
7.62mm, All Types	41.9	The budget request includes Ball, Tracer and Blank ammunition for war reserves and training requirements. The FY 1984 request is for 131,618,000 rounds of various types of 7.62mm cartridges.
Cal .22, All Types	.3	The requested procurement supports training requirements.  The FY 1984 request is for 3,041,000 caliber .22 ball match cartridges.
Cal .45, All Types	1.9*	This request supports war reserve and training requirements.

<sup>\*</sup> Includes \$.2 million from items under \$900,000

4-15 January 1983

TYPE	\$ (Millions)	REMARKS
9mm Ball	1.2	Procurement for this item begins in FY 1984. It supports both war reserve and training with the 9mm hand gun.
Limited Range Plastic Ammunition	2.3	This request supports training requirements. This item is required where range facilities will not accommodate standard munitions. Plastic ammunition includes 5.56mm and Gal .50 rounds.
Cal .50, All Types	47.0	This request supports both war reserve and training requirements.
20-wa, All Types	16.4	This request supports training with the Vulcan and COBRA helicopter 20mm weapon systems. The FY 1984 request is for 2,788,000 20mm TP-T Vulcan cartridges in the amount of \$11.4 million and 1,421,000 20mm TP-T M220 cartridges in the amount of \$5.0 million.
30mm, All Types	\$ 18.9	The budget request includes the High Explosive (HE) Dual Purpose (DP) and Target Practice (TP) rounds in support of war reserve and training requirements. The FY 1984 request is for 456,000 30mm HE-DP cartridges in the amount of \$13.7 million and 360,000 30mm TP cartridges in the amount of \$5.2 million.
25mm, All Types	91.9	The request includes the Target Practice, High Explosive Incendiary (HEI), Armor Piercing Discarding Sabot (APDS) and Dummy rounds in support of war reserve and training requirements. The FY 1984 request is for 1,599,000 25mm TP-T cartridges in the amount of \$42.2 million, 542,000 25mm HEI-T cartridges in the amount of \$21.1 million, 677,000 25mm APDS-T cartridges in the amount of \$25.3 million and 147,000 25mm dummy cartridges in the amount of \$3.3 million.

4-16 January 1983

TYPE	\$ (Millions)	<u>REMARKS</u>
40mm, All Types	111.1	The budget request is primerily for DIVAD ammunition (\$109.3 million) including High Explosive Incendiary, Target Practice, Dummy, and High Explosive with Proximity Fuze rounds. The remainder is for the 40mm practice round used with small arms. The FY 1984 request is for 201,000 40mm HEIT cartridges in the amount of \$37.5 million, 174,000 40mm TP-T cartridges in the amount of \$17.9 million, 171,000 40mm HE with proximity fuze cartridges in the amount of \$52.5 million, 10,000 40mm dummy rounds in the amount of \$1.4 million and 612,000 40mm low velocity cartridges in the amount of \$1.8 million.
Mortar Ammunition (\$124.9 Mill:	ion)	
60mm, All Types	20.2	The budget request is for the High Explosive round with multi-option fuze in support of both war reserves and training. The FY 1984 request is for 148,000 cartridges.
Sles, Illuminating	22.4	The illuminating round is required to support the standard 81mm morter wer reserve and training requirements. The FY 1984 request is for 143,000 cartridges.
81mm, Improved, HE	5.1	Procurement of this cartridge begins in FY 1984. This buy supports training and war reserve objectives. The FY 1984 request is for 19,000 cartridges.
4.2-Inch, All Types	77.2	The budget request includes 4.2-inch High Explosive and Illuminating rounds to support training and war reserve requirements. The FY 1984 request is for 382,000 4.2-inch HE cartridges in the amount of \$44.9 million and 141,000 4.2-inch illuminating cartridges in the amount of \$32.3 million.
		4-17 January 1983

TYPE	\$ (Millions)	REMARKS
Nuclear Materiel (\$112.0 Million	<u>a)</u>	
Nuclear Materiel	112.0	The budget request includes funding for projectiles and support materiel.
Other Assunition (\$142.8 Million	<u>n)</u>	
Hand Grenades	16.5	The request includes smoke grenades and the High Explosive anti-srmor grenade. The FY 1984 request is for 2,924,000 hand grenades.
Signals	25.1*	The budget request includes colored smoke signals and smoke pots for both war reserves and training.
Simulators	26.0*	Several types of simulators are included in the request in support of training.
Rockets	7.5	Funding for the 66mm Incendiary round is included in support of war reserve and training.
Demolition Munitions	18.6*	The request includes demolition charges, cratering kits, firing devices, igniters, and riot control items.
Assumition Components/Support	38.6	The budget request includes funding for components for special tests, prove-out, and renovation of field stock, and malfunction investigations.
Stockpiling of Explosives and Propellants	7.9	Funding is requested to procure Comp A-5 to support load, assembly and pack for assumition end items.
Other	2.6	Funding for marksmanship training, spares and repair parts, and other small programs are included in the budget request.

<sup>\*</sup> Includes items from the under \$900,000 category; \$.5 million demolition munitions; \$.3 million signals; \$.3 million simulators.

4-18 January 1983

#### WAR RESERVE AMMUNITION, TRAINING AMMUNITION AND NON-HARDWARE PROGRAMS, FY 1984

(\$ Millions)

War Reserve Ammunition:

\$1,471.7

Training Ammunition:

543.9

Non-Hardware Programs:

41.3

\$2,056.9

In order to support worldwide training consumption, the following ammunition is being procured to increase U.S. Army readiness.

TRAINING ITEMS	QUARTITY	DOLLARS (MILLIONS)
Cartridge, 5.56mm Ball	227,940,000	39.0
Cartridge, 5.56mm Blank	88,372,000	9.7
Cartridge, 5.56mm Plastic	440.000	.4
Cartridge, Caliber .22 Ball Match	3,041,000	.3
Cartridge, 7.62mm Blank	30,848,000	8.7
Cartridge, 7.62mm, Linked	71,365,000	23.3
Cartridge, 7.62mm, Match	1,471,000	•7
Cartridge, 5.56mm Ball/Tracer	19,568,000	7.5
Certridge, 9mm Ball	312.000	.1
Cartridge, Caliber .45 Ball	7,945,000	1.7
Cartridge, Caliber .45 Wadcutter	1,295,000	.2
Cartridge, Caliber .50 APIT	1,710,000	3.7
Cartridge, Caliber .50 Plastic	957,000	1.9
Certridge, Caliber .50 Ball, Linked	463,000	.6
Cartridge, Caliber .50 Ball/Tracer	23,931,000	32.8
Cartridge, Caliber .50 Blank, M2	6,423,000	5.8
Cartridge, Caliber .50 Blank, M85	1,787,000	2.8
Cartridge, Caliber .50 Tracer	639,000	1.3
Cartridge, 25mm HEIT	15,000	.6

4-19 January 1983

TRAINING	QUANTITY	DOLLARS (MILLIONS)
Cartridge, 25mm, APDS-T	500,000	<b>18.7</b>
Cartridge, 25mm, TP-T	1,599,000	42.2
Cartridge, 25mm, Dummy	147,000	3.3
Cartridge, 20mm TP-T, M220	1,421,000	5.0
Cartridge, 20mm, TP-T, Vulcan	2,778,000	11.4
Cartridge, 30mm, HR-DP	26,000	.8
Cartridge, 30mm, TP	360,000	5.2
Projectile, 64mm Riot Control, XM742	34,000	1.1
Projectile, 64mm Riot Control	90,000	1.3
Cartridge, 40mm Practice	612,000	1.8
Cartridge, 40mm HBIT, DIVAD	19,000	3.5
Cartridge, 40mm TP-T, DIVAD	174,000	17.9
Cartridge, 40mm Dummy, DIVAD	10,000	1.4
Cartridge, 40mm RE, DIVAD	21,000	6.4
Cartridge, 75mm Blank	124,000	3.8
Cartridge, 105 mm Blank	57,000	1.8
Cartridge, 81mm Illuminating	97,000	15.2
Cartridge, 81mm (Improved) HE	19,000	5.1
Cartridge, 105mm D8-TP	173,000	38.5
Cartridge, 105mm TP-T	168,000	34.1
Cartridge, 4.2-inch HE	100,000	11.8
Cartridge, 4.2-inch Illuminating	100,000	22.9
Charge, Propelling 155mm, M119	25,000	3.0
Cartridge, 165mm TP	10,000	3.0
Fuse, Hand Grenade, Practice	2,547,000	2.8
Grenade, Smoke, Screening	32,000	2.7
Grenade, Hand, Smoke, HC	135,000	1.8
Grenade, Hand, Smoke, Green	85,000	1.6
Grenade, Hand, Smoke, Yellow	68,000	1.2
Rocket 66mm Incendiary	9,550	5.0
Smoke Pot, HC, 30 Pound	37,000	7.2
Smoke Pot, Floating	14,000	2.8
Signal Kit, Foilage Penetrating	2,000	.1
Signal, Illuminating, Red	69,000	2.4
Signal, Illuminating, White	45,000	1.5
Signal, Illuminating, Red Star	24,000	.8

4-20 January 1983

TRAINING	QUANTITY	DOLLARS (MILLIONS)
Signal, Illuminating, White Star	172,000	5.7
Signal, Illuminating, Green Star	98,000	3.3
Signal, Smoke, Green	6,000	.2
Signal, Illuminating, Green	29,000	1.2
Simulator, Projectile, Air Burst	86,000	1.7
Flare, Surface, Trip	5,000	.1
Simulator, Projectile, Ground Burst	884,000	6.9
Simulator, Booby Trap, Illum	46,000	.1
Simulator, Booby Trap, Whistling	80,000	•2
Simulator, Atomic	427	.6
Charge, demolition 1/4 pound	325,000	.9
Charge, Demolition, one pound	98,000	•5
Charge, Demolition, 40 pound	12,000	1.8
Cap, Blasting, Electric	67,000	•2
Charge, Demolition, Shaped M2	11,000	2.1
Charge, Demolition, Shaped, 40 pound	10,000	3.1
Cord, Detonating	2,305,000	.3
Demolition Kit, Cratering	208	•7
Firing Device, Multi-purpose	206,000	1.5
Fuse, Blasting, Time	915,000	.1
Cutter, powder actuated	7,000	•2
Simulator, Flash	796,000	4.5
Fuse, Mechanical Time	18,000	1.4
Fuse, Proximity	32,000	2.4
Primer, Percussion	259,000	1.0
Cartridge, 60mm HE	23,000	3. t
Projectile, 155mm, RAAMS	1,000	2.0
Projectile, 155mm, Copperhead	150	8.0
Projectile, 155mm, Smoke WP	9,000	6.1
Simulator, Antitank, M22	2,110,000	12.0
Cartridge, 120mm TP-T	13,000	17.2
Cartridge, 120mm TPDS-T	13,000	<u>24.6</u>
	TOTAL	\$543.9 Million

TAL \$343.9 M111

4-21 January 1983

Department of the Army Annual Budget Estimate	Appropriation PROCUREMENT OF AMMUNITION, ARMY	FY 1984
Justification	·	Budget
Budget Program	(Thousands of D	ollars)
		Estimate
Activity 1 - Ammunition	FY 1	
Direct Budget Plan		\$2,840,600

#### PURPOSE AND SCOPE

AMMUNITION. The FY 1985 program continues to provide for worldwide training consumption, improvements in near term readiness and in combat sustainability, and the acquisition of war reserve stocks for use during wartime.

#### JUSTIFICATION OF FUNDS REQUESTED

The fiscal year 1985 program provides for worldwide training consumption and losses to inventory through the FY 1985 funded delivery period; increases US Army readiness in support of the FY 1987 authorized acquisition objective and maintains an active ammunition production base in FY 1985 for modernization and training type munitions. The FY 1985 program includes over 50 different types of ammunition with the following category breakout: \$417.9 million for tank ammunition, \$128.5 million for fuzes, \$900.6 million for actillery ammunition, \$181.8 million for propelling charges, \$469.4 million for small arms ammunition, \$182.6 million for morter ammunition; \$81.1 million for nuclear projectile and materiel; \$141.3 million for rockets and \$337.4 million for other ammunition, spares and components for tests, renovation and proveout. Of the \$2,840.6 million total for ammunition hardware, \$1,628.8 million is allocated to tank gun and artillery munitions and their related fuzes and propelling charges.

4-22 January 1983

Department of the Army	Appropriat	ion		FY 1984
Annual Budget Estimates				
JUSTIFICATION	Procurement	of Ammunition	, Army	Budget
Program or Budget Project Account		(Thousands	of Dollars)	
	Actual	Estimate	Estimate	Estimate
	FY 1982	FY 1983	FY 1984	FY 1985
Direct Obligation or Direct Budget Plan	\$301,720	\$404,494	\$277,339	\$563,600

#### PURPOSE AND SCOPE

AMMUNITION PRODUCTION BASE SUPPORT. The FY 1984 program provides for the support of plants in active production and the modernization and expansion of production capability for ammunition, layaway of industrial plants and equipment, and the manufacturing technology to facilitate and improve the production of ammunition.

#### JUSTIFICATION OF FUNDS REQUESTED

Provision of Industrial Facilities (P-1 Line Item No. 57)

(\$ Thousands)

FY 1984 235,639 FY 1985 491,800

The major effort for the ammunition provision of industrial facilities program in FY 1984 is the modernization and expansion program. The FY 1984 modernization and expansion program of \$205.1 million (including construction) is the sixteenth year of a long range, multi-billion dollar capital investment program which seeks to modernize existing World War II facilities which are deteriorated, obsolete, and inefficient, and to expand the base, where required, to provide the production capability to produce new, modernized ammunition items. The principal thrust of the program in FY 1984 is the establishment of production base capability to produce new and more effective modernized ammunition items. New production capability is established or expanded for Combined Effect Munitions (CEM); members of the Family of Scatterable Mines (FASCAM); 105/120mm tank ammunition, 155mm artillery ammunition, 25mm GAU-12 ammunition, and BIGEYE chemical bomb munitions.

In the FY 1984 program, a total of \$14.0 million is requested for facilities to produce metal parts for the combined effects munitions. Also in the area of new initiatives are three projects totalling \$90.3 million to provide facilities for chemical binary munitions. Two facilities are included in support of the Navy BIGEYE bomb for fill, load, assemble and pack at Pine Bluff Arsenel and a commercial facility for the manufacture of QL (chemical component in binary munition). A third facility for manufacture of the chemical Dichloro at a commercial facility is in support of the 155mm binary chemical projectile. In addition,

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a \$12.1 million project at a commercial facility expands the 25mm GAU-12 capability requirement to support Navy programs. A 105/120mm tank ammunition project in the amount of \$14.3 million provides facilities for the manufacture of kinetic energy metal parts and their assembly. The family of scatterable mines (FASCAM) project in the amount of \$11.9 million provides for expanded capability to load, assemble and pack the GATOR and modular pack mine system (MOPMS) mines.

Other major efforts are: an \$8.7 million project at Sunflower Army Ammunition Plant (AAP) to prove out the nitroguanidine main plant, an \$8.9 million project to provide equipment to produce a threaded base for the M509Al projectile at commercial facilities, \$1.8 million for equipment modernization of nitric acid support facilities at Holston AAP for explosives production, \$3.2 million for equipment to manufacture stick propellant for artillery ammunition at Radford AAP, \$1.6 million for automated assembly equipment for 60/81mm increment containers at a commercial facility sad a \$31.1 million design effort for out year projects.

Also included in the FY 1984 request are funds for the necessary production support and equipment replacement for plants in active production in the amount of \$30.4 million. It is expected that thirteen ammunition plants will require production support and equipment replacement funds in FY 1984.

Fast payback capital tools and equipment purchased under the Productivity Capital Investment Programs resulted in avoidance savings of \$400,000, which demonstrate the savings due to this economies, efficiencies and management improvement action.

A detailed breakout of the projects with construction begins on page 4-26. Included in this year's ammunition procurement request is \$10.2 million for construction which will require authorization in the FY 1984 Military Construction Authorization Bill.

The major effort for the ammunition provision of industrial facilities program in FY 1985 is the modernization and expansion program. The FY 1985 modernization and expansion program of \$457.7 million (including construction) is the seventeenth year of a long range, multi-billion dollar capital investment program which seeks to modernize existing World War II facilities which are deteriorated, obsolete, and inefficient, and to expand the base, where required, to provide the production capability to produce new modernized ammunition items. The principal thrust of the program in FY 1985 is the establishment of production base capability to produce the new and more effective modernized ammunition items. Production capability is being established or expanded for 105/120mm tank ammunition in the amount of \$132.7 million, 81mm XM819 red phosphorous mortar ammunition in the amount of \$1.9 million, 5.56mm squad assault weapon system (SAWS) ammunition in the amount of \$10.4 million, RDX/HMX facility design in the amount of \$12.8 million and 16 inch ammunition for Navy in the amount of \$15.7 million. These projects are needed to permit

4-24 January 1983

the introduction of these modernized ammunition items into the inventory with the resultant increase in the readiness and effectiveness of our combat forces. A detailed breakout of individual projects is provided in Section 4.

Other major efforts are \$39.3 million to modernize nitroglycerin Area 2 damaged by explosions at Radford Army Ammunition Plant (AAP), \$7.5 million for Xray inspection equipment at Iowa AAP for the 155mm rocket assisted projectile and \$38.3 million for design effort for out year projects.

Also included in the FY 1985 request are funds for the necessary production support and equipment replacement for plants in active production in the amount of \$34.1 million.

It is astimated that approximately \$66.9 million of construction will require authorization in the FY 1985 Military Construction Authorization Bill.

Layaway of Industrial Facilities (P-1 Line Item No. 58)

(\$ in Thousands)

FY 1984 FY 1985)

The \$17.3 million requested for layaway is for the protection and preservation of equipment and facilities no longer required for active production but which must be retained for future peacetime or mobilization production.

Manufacturing Technology Program (P-1 Line Item No. 59)

(\$ in Thousands)

FY 1984 24,400 FY 1985 51,600

The funds for Manufacturing Methods and Technology (MM&T) is associated with the modernization and expansion program. This program improves on-going production processes to achieve cost reductions and enhanced health, safety, and energy conservation characteristics. Additionally, this program develops production processes incorporating the latest state-of-art technology from private industry to mass produce the new and more sophisticated munitions.

4-25 January 1983

Department of the Army

FT 1984

#### Annual Budget Estimate

JUSTIFICATION

Budget

Appropriation

Budget Program or Budget Project Account

Procurement of Ammunition, Army

Activity 2 - Production Base Support

Authorization of construction required to support ammunition production base projects in the FY 1984 program is valued at \$10.2 million. Starting in FY 1977, the military construction effort is authorized in the Military Construction Authorization Bill and appropriated in the Procurement of Ammunition, Army appropriation. The Congress authorized construction in the amount of \$49.0 million in FY 1982 and \$25.1 million in FY 1983 for this program. Military Construction Project DATA (DD Form 1391), which provide detailed project information, is published under separate cover. A listing of FY 1984 construction projects is as follows:

Army Ammunition Plants (AAP)	Project No.	Project Title	PIF* Cons Estimate PS&ER**		PIF Equip Cost (Millions)	Total Project Cost (Millions)
Iowa AAP	5845333-14	Barricades	2.0			2.0
Lake City AAP	5845332-20	Fire Alarm System	.4			.4
•	5845332-24	Fuel Oil Tank Replacement	.2			.2
Lone Star AAP	5842041	Family of Scatterable Mines		1.3	9.8	11.1
Longhorn AAP	5845327-15	Shield Test Facility	.3			.3
Milan AAP	5845317-14	On Line Storage Facility	y .3			.3
Radford AAP	5840084	155mm Stick Propellant		2.1	1.1	3.2
	5845326-14	Fuel Storage Facilities	.9			.9
	5845326-15	Barricades	1.7			1.7
Scranton AAP	5845342-10	Lighting Upgarde	.7			.7
	5845342-13	Compressed Air Dryers	<u>.3</u> 6.8			3
	TOTAL GRAND TOTAL	-	6.8	3.4	10.9	21.1

(Construction) \$10.2 Million \*Provision of Industrial Facilities

\*\*Production Support & Equipment Replacement

\*\*\*Modernization/Expansion

4-26 January 1983

Department of the Army

FY1984

Annual Budget Estimate
JUSTIFICATION
Budget Program or Budget Project Account Appropriation

Procurement of Ammunition, Army Activity 2 - Production Base Support				· · · · · · · · · · · · · · · · · · ·
	FY 82 (Millions)	FY 83 (Millions)	FY 84 (Millions)	FY 85 (Millions)
Provision of Industrial Facilities (PIF)	236.8	387.3	235.6	491.8
Production Support and Equipment Replacement (PS&ER) Productivity Investments Initial Production Facilities (IPF) Modernization (MOD) Expansion (EXP)  Layaway of Industrial Facilities Manufacturing Technology Program	(41.1) (97.8) (54.5) (43.4) 24.7 29.9	(33.6) (166.3) (72.2) (115.2) 17.2	(30.4) (.1) (104.3) (10.7) (90.1) 17.3	(34.1) (74.5) (152.7) (230.5) 20.2
Depot Maintenance Plant Equipment TOTAL PBS AMMUNITION	10.3 301.7	404.5	277.3	563.6

4-27 January 1983

#### PROCUREMENT OF AMMUNITION, ARMY

#### Section 3

#### Comparison of Program Requirements and Financing

Comparison of FY 1983 program requirements as reflected in FY 1983 budget with FY 1983 program requirements as shown in FY 1984 budget.

Comparison of FY 1983 financing as reflected in FY 1983 budget with FY 1983 financing as shown in FY 1984 budget.

Comparison of FY 1982 program requirements as reflected in FY 1983 budget with FY 1982 program requirements as shown in FY 1984 budget.

Comparison of FY 1982 financing as reflected in FY 1983 Budget with FY 1982 financing as shown in FY 1984 budget.

4-28 January 1983

# COMPARISON OF FY 1983 PROGRAM REQUIREMENTS AS REFLECTED IN FY 1983 BUDGET WITH FY 1983 PROGRAM REQUIREMENTS AS SHOWN IN FY 1984 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)				
Appropriation:	Program Requirements In FY 1983 Budget	Program Requirements In FY 1984 Budget	Increase (+) or	
Procurement of Ammunition, Army	<del> </del>		Decrease (-)	
Activity 1 - Ammunition	2,205,600	1,717,500	-488,100	
Activity 2 - Ammunition Production	433,384	404,494	- 28,890	
Base Support	2,638,984	2,121,994	-516,990	

#### EXPLANATION BY ACTIVITY

Activity 1 - Ammunition. The \$488,100 thousand decrease is the net result of the FY 1983 Budget Amendment (-\$7,700 thousand), congressional action in the FY 1983 Appropriation, P.L. 97-377 (-\$460,400 thousand) and a decrease of \$20,000 thousand proposed for reprograming to Budget Activity 2.

Activity 2 - Ammunition Production Base Support. The \$28,890 thousand decrease is the net result of congressional action in the FY 1983 Appropriation (-\$49,890 thousand), a proposed reprograming increase of \$20,000 thousand offset by resources from Activity 1 and a proposed reprograming increase of \$1,000 thousand for a compartmented project.

4-29 January 1983

# COMPARISON OF FY 1983 FINANCING AS REFLECTED IN THE FY 1983 BUDGET WITH FY 1983 FINANCING

AS SHOWN IN F	AS SHOWN IN FY 1984 BUDGET		(In Thousands of Dollars)	
Appropriation:	Financing In FY 1983	Financing In FY 1984	Increase (+)	
Procurement of Ammunition, Army	Budget	Budget	Decrease (-)	
Program Requirements, (Total)	2,778,084	2.241.494	-536,590	
Program Requirements (Service Account)	(2,638,984)	(2,121,994)		
Program Requirements (Reimbursable)	( 139,100)	( 119,500)		
ess:				
Anticipated Reimbursements	144,700	125,100	- 19,600	
Reprograming from prior year budget plans	-0-	-0-	-0-	
Unobligated balance available from prior year to finance new budget plans	-0-	-0-	-0	
Unobligated balance transferred from other accounts	-0-	-0-	-0-	
dd: Unobligated balance transferred to other accounts	-0-	-0-	-0-	
Unobligated balance available to finance subsequer year budget plans	nt -0-	-0-	-0-	
BUDGET AUTHORITY	2,633,384	2,116,394	-516,990	
SUDGET AUTHORITY				
Appropriation	2,633,384	2,122,394	-516,990	
Reduction (Sec 790, P.L. 97-377)	• •	- 7,000	- 7,000	
Transferred from other accounts		1,000	+ 1,000	
Appropriation (Adjusted)	2,633,384	2,116,394	-516,990	

#### EXPLANATION OF CHANGES IN FINANCING

The total program for fiscal year 1983 has decreased by \$536,590 thousand since the FY 1983 budget request was presented to the Congress. This decrease is attributed to the following:

4-30 January 1983

Anticipated reimbursements: Estimates of sales of ammunition to customers, including foreign countries, are reduced by \$19,600 thousand to reflect current program execution plans. The anticipated reimbursements include \$5,600 thousand, to be generated by non-FMS sales of items from stock which do not require replacement, which will be available to finance direct Army programs.

Budget Authority: The decrease of \$516,990 is the result of the Budget Amendment, congressional action in the FY 1983 Appropriation (P.L. 97-377) and reprogramings previously described in the FY 1983 program comparison. The adjusted appropriation figure also reflects these changes.

4-31 January 1983

### COMPARISON OF FY 1982 PROGRAM REQUIREMENTS AS REFLECTED IN FY 1983 BUDGET WITH FY 1982 PROGRAM REQUIREMENTS AS SHOWN IN FY 1984 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars) Increase (+) Appropriation: Total Program Program Requirements In FY 1984 Budget Requirements or Decrease (-) Procurement of Ammunition, Army In FY 1983 Budget Activity 1 - Ammunition Activity 2 - Ammunition Production 1,990,600 311,900 2,020,895 +30,295 301,720 -10,1802,302,500 2,322,615 +20,115 Base Support

#### Explanation by Activity

Activity 1 - Ammunition. The \$30,295 thousand increase is the net result of reprograming of resources from Activity 2 (+\$8,780 thousand), application of receipts from non-FMS sales of items which do not require replacement in Army inventories (+\$115 thousand) and congressional action on various FY 1982 reprograming requests proposing transfers to other Army accounts (+\$21,400 thousand).

Activity 2 - Ammunition Production Base Support. The \$10,180 thousand decrease is the net result of congressional action in the FY 1982 Supplemental Appropriation, P.L. 97-257 (-\$1,500 thousand), denial of reprograming action FY 82-31 (+\$100 thousand) and reprograming to Activity 1 (-\$8,780 thousand).

4-32 January 1983

### COMPARISON OF FY 1982 FINANCING AS REFLECTED IN THE FY 1983 BUDGET WITH FY 1982 FINANCING

AS SHOWN IN	FY 1984 BUDGET	(In Thousan	ds of Dollars)
Appropriation:	Financing In FY 1983	Financing In FY 1984	Increase (+)
Procurement of Ammunition, Army	Budget	Budget	Decrease (-)
Program Requirements, (Total)	2,361,200	2,406,611	+45,411
Program Requirements (Service Account)	(2,302,500)	(2,322,615)	( +20,115)
Program Requirements (Reimbursable)	( 58,700)	( 83,996)	( +25,296)
Less: Anticipated Reimbursements	62 200	04 111	( ,20 811)
watterbated wermoutsements	63,300	84,111	( +20,811)
Reprograming from prior year budget plans	-0-	~0-	-0-
Unobligated belance available from prior year to			
finance new budget plans	-0-	-0-	-0-
Unobligated balance transferred from other accounts	84,000	-0-	+84,000
dd: Unobligated balance transferred to other account	:s 84,000	-0-	-84,000
Unobligated balance available to finance subsequ	ient		
year budget plans	-0-	10,000	+10,000
BUDGET AUTHORITY	2,297,900	2,322,500	+34,600
SUDGET AUTHORITY			
Appropriation	2,381,900	2,381,900	-0-
Transferred to other accounts	-84,000	-49,400	+34,600
Appropriation (Adjusted)	2,297,900	2,332,500	+34,600

4-33 January 1983

#### EXPLANATION OF CHANGES IN FINANCING

The total fiscal year 1982 program has increased by \$45,411 thousand since the FY 1983 budget request was presented to the Congress. This increase is due to the following:

Anticipated Reimbursements: The \$20,811 thousand increase reflects actual sales of munitions to foreign countries and other non-U.S. Army customers. The anticipated reimbursements include \$115 thousand, which was generated by non-FMS sales of items from stock which do not require replacement and is available to finance direct Army programs.

Unobligated balance transferred from/to other accounts: The transactions shown in the FY 1983 budget are reversed due to congressional denial of a reprograming transfer of funds to other accounts.

Unobligated balance available to finance subsequent year budget plans: The \$10,000 thousand increase represents funds which were transferred to RDTS, Army (Reprograming Action No. FY 82-51 PA) during FY 1983 which are no longer available to the Procurement Amagnition, Army.

Budget Authority: The increase of \$34,600 is the net result of changes described above. The total shown, as well as the adjusted appropriation figure, include \$10,000 which is no longer available.

4-34 January 1983

PROCUREMENT OF AMMUNITION, ARMY

Section 4

Selected Data Sheets

4-35 January 1983

Service: Army

P-1 Line Item: Provision of Industrial Facilities

Projects:	<u>FY82</u>	FY83	<u> FY84</u>	<u>FY 85</u>
Annual Support				
5820252 - Pine Bluff Arsenal: Support (Spt): Production Support & Equipment Replacement (PS&R)	1.8			
5824806 - Armsment Research and Development Command: Spt - PS&R	1.3			
5845060 - Jefferson Proving Ground: Spt - PS&R	2.2	1.5	1.0	2.0
5825201 - Inactive Plants: Spt - Energy Conservation and Management	1.1			
5845314 - Louisiana Army Ammunition Plant (AAP): Spt - PS&R		1.1	1.3	2.0
5845316 - Lone Star AAP: Spt - PS&R	1.8	1.8	2.8	2.9
5845317 - Milan AAP: Spt - PS&R	2.5	1.3	2.5	2.8
5845326 - Radford AAP: Spt - PS&R	6.7	5.1	5.6	5.9
5845327 - Longhorn AAP: Spt - PS&R	1.4	3.7	2.2	2.6
5845328 - Holston AAP: Spt - PS&R	3.9	1.5	3.0	1.8
5845329 - Kansas AAP: Spt - PS&R	3.1	2.4	2.7	2.7
5845330 - Indiana AAP: Spt - PS&R	5.1	3.3		2.1
5845332 - Lake City AAP: Spt - PS&R	2.6	3.2	2.4	2.5
5845333 - Iowa AAP: Spt - PS&R	2.9	3.9	3.1	2.9
5845342 - Scranton AAP: Spt - PS&R	1.9	3.7	2.6	2.9
5845662 - All Plants: Omnibus Project for Purchase of Self-Amortising Equipment		1.0	1.0	1.0
Projects under \$900,000 each	2.8	1	2	
Subtotal Production Support & Equipment Replacement	41.1	33.6	30.4	34.1

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	FY82	FY83	FY84	FY85
Productivity Investments				
Projects under \$900,000 each			1	
Subtotal Productivity Investments			<del>-:</del>	
Projects	,			
Initial Production Facilities (IPF)				
5820019 - Commercial: IPF - 40mm DIVAD Ammunition	47.5			
5820048 - Kansas Army Ammunition Plant (AAP): IPF -	19.7			
Combined Effects Munitions				
5820050 - Commercial: IPF - Tactical Munitions Dispenser	6.2			
5820072 - Crane AAA: IPF - 5-inch Hi-Frag Beaker Loading	2.3			
5822266 - Lake City AAP: IPF - Squad Assault Weapon	1.9			
Systems (SAWS) Ammunition				
5822326 - Commercial: IPF - Acquisition of Viper Equipment - Phase II	11.0			
5822366 - Louisiana AAP: IPF - M825/687 Projectile	2.0			
Metal Parts	2.0			
5823065 - Commercial: IPF - 40mm M430 High Explosive	5.4			
Dual Purpose Ammunition				
5830020 - Commercial: IPF - PASCAM Metal Parts		17.6		
5830025 - Commercial: IPF - 105/120mm XM833/XM829		18.5		
Kinetic Energy Penetrators				
5830026 - Iowa AAP: IPF - 120mm Projectile Load		10.7		
Assemble & Pack (LAP)				
5830027 - Commercial: IPF - 120mm Combustible Cartridge Case		5.3		
5830037 - Pine Bluff Arsenal: IPF - L8A1 Red			•	
Phosphorous Grenade LAP		2.4		
5830039 - Commercial: IPF - 105/120mm High Explosive		22.9		
Anti-Tank Projectile Metal Parts		44.7		

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#### Projects

#### Initial Production Facilities (IPF), Continued

	FY82	FY83	FY84	FY85
5830061 - Commercial: IPF - 120mm Stub Base		21.6		
5830074 - Commercial: IPF - Bigeye Bomb Metal Parts		12.8		
5830094 - Commercial: IPF - FMU-139/B Electronic Bomb Fuze		5.8		
5832200 - Radford AAP: IPF - 2.75-inch MK66 Rocket Grains		1.9		
5832206 - Commercial: IPF - 105/120mm Kinetic Energy Metal Parts	8	41.1		
5832229 - Radford AAP: IPF - 120mm Propellant		1.6		
5834871 - Iowa AAP: IPF - FASCAM LAP Load Assemble & Pack (GATO)	R)	3.6		
5840051 - Commercial: IPF - Combined Effects Munitions Metal Parts			14.0	
5840063 - Pine Bluff Arsenal: IPF - Bigeye Bomb Load Assemble &	Pack (LA	(P)	30.6	
5840079 - Commercial: IPF - QL Production Facility for Bigeye Bomb	(_	<del></del> ,	34.5	
5840103 - Commercial: IPF - DC Production Facility for 155mm M687 Projectile			25.2	
5850064 - Pine Bluff Arsenal: IPF - XM819 Red Phosphorous Mortan Load Assemble & Pack (LAP)	•			1.0
5850077 - Commercial: IPF - Fuze - Solid Carbide Hob Facility				1.0
5850085 - Commercial: IPF - 105mm XM815 Metal Parts				56.1
5850099 - X-Facility: IPF - 105mm XM815 Load Assemble & Pack (Ld	(P)			15.5
5850202 - Pine Bluff Arsenal: IPF - Red Phosphorous	/			.9
Smoke Mix Blending Facility				•
Projects under \$900,000 each	1.8	5		
Subtotal, Initial Production Facilities (IPF)	97.8	166.3	104.3	74.5

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#### **Projects**

#### MODERNIZATION (MOD)

	FY82	<u>FY8</u> 3	<u>FY84</u>	FY85
5820285 - Pine Bluff Arsenal: MOD - Grenade Hexachloroethane (HC) Smoke M8 LAP	1.5			
5822052 - Holston Army Ammunition Plant (AAP): MOD - Comp B Line 1 Improvements	7.5			
5822138 - Kansas AAP: MOD - M42/M46 Grenade In-Process Storage Igloos	.9			
5822146 - Lake City AAP: MOD - Small Caliber Ammunition Modernization Program (SCAMP) Line 1 Spare Parts	1.2			
5822317 - Radford AAP: MOD - Ammonia Oxidation Plant Modifications	5.3			
5822353 - Louisiana AAP: MOD - 155mm Projectile Metal Parts Rate/Technical Data Package Deficiencies	2.7			
5822365 - Lake City AAP: MOD - Cartridge Case Measurement and Eject System	2.3			
5822380 - Sunflower AAP: MOD - Restore 300 Ton Per Day Ammonia Oxidation Plant-Phase I	1.1			
5823089 - Commercial: MOD - 5-inch/54 Projectile Manufacturing Facility	10.3			
5823106 - Lone Star AAP: MOD - Container Distribution Pacility	2.0			
5823186 - Commercial: MOD - Active Munitions Metal Parts Facilities - Phase I	3.3			
5823225 - Commercial: MOD - 30mm Production Equipment	1.7			
5823593 - Iowa AAP: MOD Rehabilitate Main Heating Plant	12.8			
5832066 - Indiana AAP: MOD - Power Tie Line		4.0		
5832109 - Milan AAP: MOD - Rehabilitation of K-10 Boiler Facility		5.8		

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#### Projects

#### Modernization (MOD), Continued

	FY82	FY83	FY84	FY85
5832127 - Volunteer Army Ammunition Plant (AAP): MOD - Modifications to Continuous TNT Area		4.7		
5832201 - Lake City AAP: MOD - SCAMP Line 3 Completion		4.4		
5832202 - Lake City AAP: MOD - SCAMP Lines 4, 5 Completion	•	13.3		
5832250 - Multiple Sites: MOD - Pyrotechnic Temperature and Humidity Controls		3.7		
5832260 - Multiple Sites: MOD - Pyrotechnic Safety Enhancement		2.1		
5832380 - Sunflower AAP: MOD - Restore 300 Ton Per Day Ammonia Oxidation Plant		4.2		
5833107 - Louisiana AAP: MOD - Container Distribution Facility		3.3		
5833176 - Commercial: MOD - Fuze Production Equipment		3.3		
5833178 - Commercial: MOD - Fuse Production Equipment Modernization		2.2		
5833190 - Commercial: MOD - Improved Metal Parts Productivity		10.7		6.8
5833605 - Kansas AAP: MOD - Consolidated Plant Operations Center		7.4		
5843215 - Commercial: MOD - 8-inch M509 Threaded Base			8.9	
5843906 - Rolston AAP: MOD - Nitric Acid Support for explosives Production		3.1	1.8	
5852145 - Lone Star AAP: MOD - 60/81mm Mortar Test and Assembly Equipment				1.1
5852151 - Milan AAP: MOD - M42/M46 Tape Stiffener Assembly				3.6
5852158 - Indiana AAP: MOD - Central Laboratory Renovation				2.3
5852159 - Indiana AAP: MOD - Propelling Charge Qualification Building				2.3

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#### Projects

HOGEL III T	continued				
5852106	Dies miest de la veneral de la	FY82	FY83	FY84	FY85
3032130 .	Pine Bluff Arsenal: MOD - Material Handling Equipment for Bulk Chemicals		<del></del> -	<del></del>	2.1
5852198 -	Joliet Army Ammunition Plan (AAP): MOD -				
	Occupational Safety & Health Act (OSHA)				4.7
	Corrections and Upgrade of TNT Lines				
5852199 -	- Holston AAP: MOD - Coal Handling Rouinment				3.2
5852208 -	Lake City AAP: MOD - Squad Assault Weapon System				6.7
	(SAWS) Conversion of Small Caliber Ammunition Moderni-	•		•	0.7
E052222	sation Program (SCAMP) Equipment				
3632222 -	Iowa AAP: MOD - 155mm M549 Projectile Inspec-				7.5
5852225 -	tion Equipment				
JUJELLJ	Radford AAP: MOD - Overhaul of Power Genera- tion and Distribution System				10.6
5852232 -	Lake City AAP: MOD - 5.56mm Blank Production				
	on SCAMP				3.4
5852240 -	Multiple Sites: MOD - Pyrotechnic Safety,				
	Preignition Detector/Vapor Sensor				3.2
5852290 -	Radford AAP: MOD - Modernize Continuous				39.3
	Nitrogylcerin Area 2				39.3
5852293 -	Radford AAP: MOD - TNT Area Operational Support				2.8
E952200	Pacifity				2.0
3032299 -	Radford AAP: MOD - Restoration of Mitrocellulose				3.8
5852301 -	Dehydration Facility Lows AAP: MOD - M55 Detonator Loader Replacement				
5852355 -	Mississippi AAP: MOD - Patrol Roads for Mississippi				1.2
	Army Ammunition Plant (AAP)			,	· .9
5852359 -	Scranton AAP: MOD - Water Distribution Replacement				
	System				2.2
5852507 -	Louisiana AAP: MOD - Support Chemical Laboratory				
5852677 -	Iows AAP: MOD - 155mm/8 in M549/M650 Load Assemble				1.1 11.1
	& Pack (LAP)				11.1
<b>5553230 -</b>	X - Pacility: MOD - 16-inch Projectile Metal				15.7
	Parts/LAP				

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#### Projects

Modernization (MOD), Continued				
	FY82	FY83	FY84	FY 85
5853233 - Commercial: MOD - M509A2E1/XM764 Fuze Production Equipment				3.8
5853551 - X-Facility: MOD - M223 Fuze Hi-Speed Assembly Line				13.3
Projects under \$900,000 each	1.9			
Subtotal Modernization	54.5	72.2	10.7	152.7
Expansion (EXP)				
5823142 - Mississippi Army Ammunition Plant (AAP): EXP - Sixth Phase of Construction of 155mm Complex	19.5	17.7		
5823239 - Commercial: EXP - Metal Parts for MK83 1000 lb Bomb	2.8	•		
5830050 - Commercial: EXP - Tactical Munitions Dispenser Metal Parts		1.8		
5832632 - Sunflower AAP: EXP - Nitroguanidine Support		9.3		
5833197 - Commercial: EXP - M734 Fuze Hybrid Amplifier		4.8		
5840084 - Radford AAP: EXP - 155mm Stick Propellant			3.2	
5842041 - Lone Star AAP: EXP - Family of Scatterable Mines (Gator/Modular Pack Mine System) Load Assemble and	Pack		11.9	
5842207 - Commercial: EXP - 105/120mm Kinetic Energy Metal P			14.3	12.6
5842632 - Sunflower AAP: EXP - Nitroguanidine Prove-Out			8.7	12.0
5842855 - X - Facility: EXP - 25mm GAU - 12/U Ammunition			12.1	
5843194 - X - Facility: EXP - 60/81mm Mostar Increment			1.6	
Containers			1.0	
XXXXXX - X - Facility: EXP - Classified Program		43.9	7.2	65.5
5850074 - Commercial: EXP - Bigeye Bomb Metal Parts		7317	7.2	10.0
5850086 - Lake City AAP: EXP - 5.56mm Tracer Charging				10.4
Squipment				1014

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#### Projects

#### Expansion (EXP), Continued

	<u>FY82</u>	FY83	FY 84	<u> FY85</u>
5852343 - Iowa Army Ammunition Plant (AAP): EXP - Family of Scatterable Mines Presses and Igloos				7.4
5852386 - Kansas AAP: EXP - Combined Effects Munitions Load Assemble & Pack				4.6
5852528 - X - Facility: EXP - RDX/HMX Explosive Facility Design				12.8
5853165 - Commercial: EXP - 105/120mm High Explosive Anti-Tank Projectile Metal Parts				15.8
5853192 - Commercial: EXP - 120mm Stub Base				23.6
5853199 - Commercial: EXP - Remote Anti-Armor Mine Metal Parts				4.0
5853212 - Commercial: EXP - 120mm Combust. Cartridge Case				9.1
5853247 - Commercial: EXP - Fuze FMU-139/B				11.3
5853549 - X - Facility: EXP - M223 Fuse Metal Parts				5.1
Omnibus Engineering Design	20.5	34.6	31.1	38.3
Projects Under \$900,000 Each	6	3.1		
Subtotal Expansion	43.4	115.2	90.1	230.5
Subtotal Provision of Industrial Facilities	236.8	387.3	235.6	491.8
P-1 Line Item: Layaway of Industrial Facilities				
Projects			2	
5848450 - Armament Materiel Readiness Command (ARRCOM): Layaway and/or Redistribution of Government- Owned Equipment in Government-Owned Plants	20.5	11.5	12.0	14.7

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Projects				
	FY82	FY83	<u>FY84</u>	FY85
5849589 - ARRCOM: Layaway and/or Redistribution of Govern- ment-Owned Equipment	4.2	5.7	5.3	5.5
Subtotal Layaway of Industrial Facilities	24.7	17.2	17.3	20.2
Manufacturing Technology	•			
5851801 - Manufacturing Methods and Technology (MMT):				2.0
Automated Assembly for M734 fuze				
5841802 - MMT: Automated Microelectronics Inspection			1.0	
5824061 - MMT: Nitroguanidine Process Optimization	1.2			
5824062 - MMT: Automated Manufacturing Mortar Increment Containers	3.2			
5844078 - MMT: Improve Existing Helt Pour Lines			.9	
5854281 - MMT: Conservation of Energy at Ammunition Plants	1.4		••	2.2
5824309 - MMT: 120mm Tank Ammunition	4.0			
5824454 - MMT: Automated Inspection of Explosive Cast in Shell	1.5			
5824489 - MMT: Pollution Abatement Technology	1.4			
5844531 - MMT: Prototype Production of Stick Propellant			1.0	.9
on Continuous Automated Multi-Base Line				
5844534 - MMT: SAWS Bullet conversion of SCAMP Equipment			1.8	
5854554 - MMT: Combustible Component Pilot Plant				1.2
5824557 - MMT: Artillery Ballistic Acceptance Test (ARBAT)	2.5			
5844563 - MMT: Process Improvement for Depleted Uranium			3.1	1.5
Penetrators				
5844564 - MMT: Environmental Control Techniques at Amsunition	Plants	•		1.1
5854572 - MMT: Improve Batch Process Multibased Propellants				1.0
5854573 - MMT: Combined Compound Mix & Extrusion of Single				1.2
Base Propellant				
5854576 - MMT: Screw Extrusion of Solventless Propellant				1.0
5854584 - MMT: Loading Equip for CAL .50 Ball & Blank Ammo				.9

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	FY82	<u>FY83</u>	FY84	FY85
Projects Under \$900,000	14.7		15.5	38.7
Subtotal Manufacturing Technology	29.9	-0-	24.4	. 51.6
P-1 Line Item: Depot Maintenance Plant Equipment				
Projects				
Ammunition Peculiar Equipment in Support of Worldwide Depot	10.3			
Subtotal Depot Maintenance Plant Equipment	10.3	-0-	-0-	-0-
Total Ammunition Production Base Support	301.7	404.5	277.3	563.6

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REPORT DOCUMENTATION	PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
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Submitted to Congress January 1983		Justification, FY 1984
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18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continuo en reverse elde il necessary and identity by block number)
Army Procurement Programs Budget Justification Book covering Aircraft,
Missiles, Weapons and Tracked Combat Vehicles, Ammunition and Other Procurement,
Army Appropriations programs submitted by the Army to Congress January 1983
for Fiscal Year 1984.

A ABSTRACT (Cauthous incorres of the Annexes and Idealth by block number)
In justification of programs requested, this document, in separate volume for each of the five Procurement Appropriations, provides backup data for the Army Budget submission for FY 1984. Included are Summaries of Requirements, Program and Financing Statements and Selected Data Sheets. (These volumes are unclassified).

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